AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1-10 (Canceled).

11. (Currently Amended) A device for ascertaining an amount of charge that is able to be drawn from an energy storage unit, up to at least one cutoff threshold, comprising:

a charge predictor for calculating~~, in the case of a specified discharge current characteristic,~~ the amount of charge that is able to be drawn from the energy storage unit, up to the at least one cutoff threshold~~, on the basis of a mathematical energy storage model that mathematically represents electrical properties of the energy storage unit; and~~ wherein the calculated amount of charge is based on the product of a time value and a measured or a predetermined discharge current, and wherein the time value is based on an amount of time before the at least one cutoff threshold is met; and

an estimator for ascertaining at least one [[of]] state variable[[s]]~~ and parameters for the mathematical energy storage model~~, based on at least one operating performance quantity ~~quantities~~ of the energy storage unit, wherein the charge predictor includes a mathematical energy storage model that receives the at least one state variable as input and provides an estimate of a variable value as a function of time, and wherein the time value is an estimated point in time when the variable value meets or exceeds the at least one cutoff threshold.

12. (Previously Presented) The device as recited in Claim 11, wherein the energy storage unit is a battery, and wherein the mathematical energy storage model is a battery model that includes at least a mathematical model for an internal resistance, an acid diffusion resistance, and a charge transfer polarization.

13. (Previously Presented) The device as recited in Claim 12, wherein the estimator ascertains at least an open-circuit voltage and a concentration polarization as the state variables.

14. (Previously Presented) The device as recited in Claim 13, wherein the estimator additionally ascertains a charge transfer polarization.

15. (Currently Amended) The device as recited in Claim 12, wherein the charge predictor ascertains an amount of charge that is able to be drawn until a ~~specified~~ predetermined minimum electrolyte voltage that represents a first cutoff criterion is reached.

16. (Currently Amended) The device as recited in Claim 15, wherein the charge predictor ascertains an amount of charge that is able to be drawn until a ~~specified~~ predetermined minimum voltage of the energy storage unit that represents a second cutoff criterion is reached.

17. (Currently Amended) The device as recited in Claim 16, wherein the charge predictor ascertains an amount of charge that is able to be drawn until a ~~specified~~ predetermined minimum capacity that represents a third cutoff criterion is reached.

18. (Currently Amended) The device as recited in Claim 12, further comprising:

a voltage predictor for ascertaining, as a function of a load current characteristic ~~that is specified~~, a corresponding load voltage that arises on the basis of the ~~specified~~ load current characteristic.

19. (Currently Amended) A method for ascertaining an amount of charge that is able to be drawn from an energy storage unit, up to at least one ~~specified~~ cutoff threshold, comprising:

calculating, using a charge predictor, ~~in the case of a specified discharge current characteristic,~~ the amount of charge that is able to be drawn from the energy storage unit~~, on the basis of a mathematical energy storage model that mathematically represents electrical properties of the energy storage unit, wherein the energy storage unit is a battery; and,~~ wherein the calculated amount of charge is based on the product of a time value and a measured or a predetermined discharge current, and wherein the time value is based on an amount of time before the at least one cutoff threshold is met;

ascertaining, using an estimator, at least one of state variables and parameters ~~for the mathematical energy storage model~~, based on at least one operating performance quantity ~~quantities~~ of the energy storage unit[[;]], wherein the charge predictor includes a mathematical energy storage model that receives the at least one state variable as input and

provides an estimate of a variable value for any given point in time, and wherein the time value is the given point in time when the variable value meets or exceeds the at least one cutoff threshold.

20. (Currently Amended) The method as recited in Claim 19, wherein the charge predictor calculates an amount of charge that is able to be drawn until a ~~specified~~ minimum capacity that represents a cutoff criterion is reached, and wherein the charge predictor takes into account a load voltage supplied to the charge predictor by a voltage predictor, the voltage predictor ascertaining the load voltage as a function of a ~~specified~~ load current characteristic.

21. (New) A charge predicting device for an energy store, comprising:

a charge predicting arrangement including:

at least a first input to receive at least one of a state variable and a parameter from a state estimator, the state estimator configured to receive as input at least one of a recent operating voltage, temperature, and current of the energy store;

at least a second input to receive at least one of a discharge current characteristic and a temperature characteristic; and

a storing arrangement to store at least one energy store performance model;

wherein the charge predicting arrangement is configured to determine a charge remaining in the energy store,

wherein the charge remaining is determined as being drawn up to at least one predetermined cutoff criteria that indicates a cutoff that is prior to a full discharge of the energy store,

wherein the at least one predetermined cutoff criteria is a threshold value for the at least one of a state variable and a parameter, and

wherein the performance model is configured to estimate a time until the threshold value is met, and the charge remaining determination is based on this time estimate.

22. (New) The device of claim 21, wherein the performance model includes at least one parameter model for an internal resistance of the energy store.

23. (New) The device of claim 21, wherein the device receives as input from the state estimator at least one of an open-circuit voltage and a concentration polarization as the state variables.

24. (New) The device of claim 21, wherein the cutoff criteria is at least one of a minimum electrolyte voltage, a minimum terminal voltage and a minimum capacity.

25. (New) The device of claim 21, wherein the charge remaining is determined as being drawn up to a point in which at least two predetermined cutoff criteria are satisfied.

26. (New) The device of claim 21, further comprising:

a voltage predictor configured to receive as input at least one of a discharge current and an energy store temperature characteristic, and to output a predicted line voltage of a load;

wherein the at least one predetermined cutoff criteria includes at least a minimum capacity, which is based at least in part on the output of the voltage predictor.

27. (New) The device of claim 21, wherein the device receives input and provides output repeatedly at preset temporal intervals.

28. (New) The device of claim 21, wherein the performance model is configured to provide an estimation of time remaining before the at least one predetermined cutoff criteria is satisfied.

29. (New) The device of claim 21, wherein the state estimator is configured to receive at least two real-time values of the energy store, including at least two of a real-time voltage, a real-time temperature, and a real-time current, and wherein the energy store performance model is based on at least one of the following values: an ohmic internal resistance, an acid diffusion resistance, a voltage difference between electrode potential and electrolyte voltage, and a stationary charge transfer polarization.